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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/882,921	06/15/2001	Todd L. Siler		3347

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HIRL, JOSEPH P

[REDACTED] ART UNIT 2121 [REDACTED] PAPER NUMBER

DATE MAILED: 12/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/882,921	SILER, TODD L.
	Examiner	Art Unit
	Joseph P. Hirl	2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 15 June 2001.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 5-90 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 5-90 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 15 June 2001 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 5-90 are pending in this application.
2. The claims and only the claims form the metes and bounds of the invention.

"Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d, 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

Drawings

3. The drawings are objected to because of the following:
 - Figs. 2-6 have the same designators
 - Fig. 7 is missing text/information along the margin
 - Figs. 8-12 have the same designators
 - Fig. 13 is missing text and information along the margin
- These objections must be corrected.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. §101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

the invention as disclosed in claims 5-90 is directed to non-statutory subject matter.

5. Claims 5-90 are not claimed to be practiced on a computer, therefore, it is clear that the claims are not limited to practice in the technological arts. On that basis alone, they are clearly nonstatutory.

6. Regardless of whether any of the claims are in the technological arts, none of them is limited to practical applications in the technological arts. Examiner finds that in *re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994) controls the 35 USC §101 issues on that point for reasons made clear by the Federal Circuit in *AT&T Corp. v. Excel Communications, Inc.*, 50 USPQ2d 1447 (Fed. Cir. 1999). Specifically, the Federal Circuit held that the act of:

...[T]aking several abstract ideas and manipulating them together adds nothing to the basic equation. *AT&T v. Excel* at 1453 quoting *in re Warmerdam*, 33 F.3d 1354, 1360 (Fed. Cir. 1994).

Examiner finds that Applicant's "selecting a Subject such as a function, topic, issue problem or opportunity...", "structures", "common materials", "elements", "represent information", "connections", "relationships", "discerning one or more physical characteristics", "retrieving one or more conceptual elements" references are just such abstract ideas.

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7. Examiner bases his position upon guidance provided by the Federal Circuit in re Warmerdam, as interpreted by AT&T v. Excel. This set of precedents is within the same line of cases as the Alappat-State Street Bank decisions and is in complete agreement with those decisions. Warmerdam is consistent with State Street's holding that:

Today we hold that the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation because it produces 'a useful, concrete and tangible result' -- a final share price momentarily fixed for recording purposes and even accepted and relied upon by regulatory authorities and in subsequent trades. (emphasis added) State Street Bank at 1601.

8. True enough, that case later eliminated the "business method exception" in order to show that business methods were not per se nonstatutory, but the court clearly did not go so far as to make business methods per se statutory. A plain reading of the excerpt above shows that the Court was very specific in its definition of the new practical application. It would have been much easier for the court to say that "business methods were per se statutory" than it was to define the practical application in the case as "...the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price..."

9. The court was being very specific.

10. Additionally, the court was also careful to specify that the "useful, concrete and tangible result" it found was "a final share price momentarily fixed for recording purposes and even accepted and relied upon by regulatory authorities and in subsequent trades." (i.e. the trading activity is the further practical use of the real world

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monetary data beyond the transformation in the computer - i.e., "post processing activity".)

11. Applicant cites no such specific results to define a useful, concrete and tangible result. Neither does Applicant specify the associated practical application with the kind of specificity the Federal Circuit used.

12. Furthermore, in the case *in re Warmerdam*, the Federal Circuit held that:

...[The dispositive issue for assessing compliance with Section 101 in this case is whether the claim is for a process that goes beyond simply manipulating 'abstract ideas' or 'natural phenomena' ... As the Supreme Court has made clear, '[a]n idea of itself is not patentable, ... taking several abstract ideas and manipulating them together adds nothing to the basic equation. *In re Warmerdam* 31 USPQ2d at 1759 (emphasis added).

13. Since the Federal Circuit held in *Warmerdam* that this is the "dispositive issue" when it judged the usefulness, concreteness, and tangibility of the claim limitations in that case, Examiner in the present case views this holding as the dispositive issue for determining whether a claim is "useful, concrete, and tangible" in similar cases.

Accordingly, the Examiner finds that Applicant manipulated a set of abstract information to solve purely algorithmic problems in the abstract (i.e., what kind of "information" is used in connecting, shaping and transforming some thing in the minds' eye and hands? Metaphorming? Applying curricular (content) materials? "...opening up the imagination of people whose creativity is severely blocked by anxiety, fear, close-mindedness or compartmentalization? "Fostering communication between family members? Improving family functionality? Symbolism or symbolic languages (e.g. euphemism, puns, riddles, visual metaphors, allegories)? Even vague expressions, about which even reasonable

persons could differ as to their meaning? Combinations thereof?) Clearly, a claim related to "metaphorming" is provably even more abstract (and thereby less limited in practical application) than pure "mathematical algorithms" which the Supreme Court has held are per se nonstatutory - in fact, it includes the expression of nonstatutory mathematical algorithms. A physically structure symbolically representing abstractness does not render a claim non-abstract.

14. Since the claims are not limited to exclude such abstractions, the broadest reasonable interpretation of the claim limitations includes such abstractions. Therefore, the claims are impermissibly abstract under 35 U.S. C. 101 doctrine.

15. Since Warmerdam is within the Alappat-State Street Bank line of cases, it takes the same view of "useful, concrete, and tangible" the Federal Circuit applied in State Street Bank. Therefore, under State Street Bank, this could not be a "useful, concrete and tangible result". Concreteness is lacking since the method steps involve human decision making and thought processes and therefore lack repeatable results. There is only manipulation of abstract ideas. Further, the claims fail to recite or sufficiently relate to any practical applications.

16. The Federal Circuit validated the use of Warmerdam in its more recent AT&T Corp. v. Excel Communications, Inc. decision. The Court reminded us that:

Finally, the decision in *re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994) is not to the contrary. ** The court found that the claimed process did nothing more than manipulate basic mathematical constructs and concluded that 'taking several abstract ideas and manipulating them together adds nothing to the basic equation'; hence, the court held that the claims were properly rejected under §101 ... Whether one agrees with the court's conclusion on the facts, the holding of the case is a straightforward application of the basic principle that mere laws of nature, natural phenomena, and abstract ideas are not within the categories of inventions or discoveries that may be patented under §-101. (emphasis added) AT&T Corp. v. Excel Communications, Inc., 50 USPQ2d 1447, 1453 (Fed. Cir. 1999).

17. Remember that in *re Warmerdam*, the Court said that this was the dispositive issue to be considered. In the AT&T decision cited above, the Court reaffirms that this is the issue for assessing the "useful, concrete, and tangible" nature of a set of claims under 101 doctrine. Accordingly, Examiner views the *Warmerdam* holding as the dispositive issue in this analogous case.

18. The fact that the invention is merely the manipulation of *abstract ideas* is clear. The data referred to by Applicant's term "Metaphorming" is simply an abstract construct that does not limit the claims to the transformation of real world data (such as monetary data or heart rhythm data) by some disclosed process. Consequently, the necessary conclusion under AT&T, State Street and *Warmerdam*, is straightforward and clear. The claims take several abstract ideas (i.e., "Metaphorming" in the abstract) and manipulate them together adding nothing to the basic equation. Claims 5-90 are, thereby, rejected under 35 U.S. C. 101.

19. Examiner considers the scope of Section 101 to be the same regardless of whether Applicant claims a "process", "machine", or "product of manufacture". While

the "apparatus" recitals in the preambles of claims 75-90 make the claims ostensibly drawn to be "apparatus" claims, they are insufficient by themselves to limit the claims to statutory subject matter. Examiner's position is clearly consistent with Alappat, and AT&T and is implicitly consistent with Warmerdam and State Street. Accordingly, those claims are also properly rejected.

20. The claims are not in the useful or technological arts and thus fail to recite patent eligible subject matter. It is noted that claim 1 (renumbered 5 under Rule 1.126) recites, "building one or more structure(s) from common materials" and that dependent claims included further definition of what is to be included as the "common materials"; however, the courts have repeatedly instructed the Patent Office to answer the question, "What did applicants invent?" (See *Abele*, 684 F.2d at 907, 214 USPQ at 687. *Accord*, e.g., *Arrhythmia Research Tech. v. Corazonix Corp.*, 958 F.2d 1053, 1059, 22 USPQ2d 1033, 1038 (Fed. Cir. 1992). In the instant case, Applicants did not invent "building one or more structure(s) from common materials" nor the "common materials" further defined in the dependent claims. Thus, such a method step is incidental to Applicants purported inventive method and is thus insufficient to render the claimed invention patent eligible, statutory subject matter. Claim 51 (renumbered 54 under Rule 1.126) is even broader, in that while a set of materials are provided, the structure assembly is not required, merely instruction to do so and is thus even further from the useful or technological arts. Claims 57 and 64 (renumbered 61 and 68, respectively, under Rule 1.126) fail to recite any steps that are even remotely associated with the useful or

technological arts and thus clearly fail to recite patent eligible subject matter. The same analysis applied above to renumbered claim 5 applies to claim 71 (renumbered 75 under Rule 1.126). None of the dependent claims overcome the deficiencies noted above with respect to the independent claims. Therefore, none of the claims recite statutory subject matter.

Claim Rejections - 35 USC § 112

21. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

22. Claims 5-90 are rejected under 35 USC 112, first paragraph because current case law (and accordingly, the MPEP) require such a rejection if a 101 rejection is given because when Applicant has not in fact disclosed the practical application for the invention, as a matter of law there is no way Applicant could have disclosed how to practice the undisclosed practical application. This is how the MPEP puts it:

("The how to use prong of section 112 incorporates as a matter of law the requirement of 35 U.S.C. 101 that the specification disclose as a matter of fact a practical utility for the invention If the application fails as a matter of fact to satisfy 35 U.S.C. § 101, then the application also fails as a matter of law to enable one of ordinary skill in the art to use the invention under 35 U.S.C. § 112."); *in re Kirk*, 376 F.2d 936, 942, 153 USPQ 48, 53 (CCPA 1967) ("Necessarily, compliance with § 112 requires a description of how to use presently useful inventions, otherwise an applicant would anomalously be required to teach how to use a useless invention. "). See, MPEP 2107.01(IV), quoting *in re Kirk* (emphasis added).

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Therefore, claims 5-90 are rejected on this basis.

23. Claims 42, 48, 55, 73, and 74 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Each of these claims relates to electronic representation or electronic devices which are not trivial matters and to which the specification fails to establish in detail such that one of ordinary skill in the art could replicate without undue experimentation.

24. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

25. Claims 5-90 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The series of terms, each as an example related to a claim, claims being in ascending order, opportunity, symbolic, functional, structures (7), logical, intuitive, any, observing, comparison, common, relations (2), subject, structure, comparison, materials, relations (2), physical, information, explaining (2), analyzing (3), interpreting (3), conceptual, relationship, interpreting, representation, explicit, tacit, meaning, purpose, implications, electronic, person (2), modifying, identifying, apply, issue, materials, questions, responses, structure, interpret (2), pieces, symbols, figuratively, necessary, structure, reflect, modifying, transforming, characteristics,

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conceptual, structure, reflected, electronically, structure, symbolize, objects, tacit, explicit, common, drawings, tabs, bark, connecting, shapes, movable, malleable, irregular, expressing, shaped and derived, along with other terms in the respective claims are relative, non specific terms or used in a manner that is non specific and render each of the claims indefinite. The applicant should understand that the above list is merely an example and that in many of the claims, additional examples can be set forth to establish indefiniteness.

Conclusion

26. The prior art of record and not relied upon is considered pertinent to applicant's disclosure.

Brown et al, USP 6,206,700

Kirsch et al, USP 5,893,717

Bergman, USP 5,890,905

Lemelson et al, 5,823,788

27. Claims 5-90 are rejected

Correspondence Information

28. Any inquiry concerning this information or related to the subject disclosure

should be directed to the Examiner, Joseph P. Hirl, whose telephone number is (703) 305-1668. The Examiner can be reached on Monday – Thursday from 6:00 a.m. to 4:30 p.m.

29. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Anil Khatri can be reached at (703) 305-0282.

Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks,
Washington, D. C. 20231;

or faxed to:

(703) 746-7239 (for formal communications intended for entry);

or faxed to:

(703) 746-7290 (for informal or draft communications with notation of "Proposed" or "Draft" for the desk of the Examiner).

Hand-delivered responses should be brought to:

Receptionist, Crystal Park II
2121 Crystal Drive,
Arlington, Virginia.

Joseph P. Hirl



ANIL KHATRI
SUPERVISORY PATENT EXAMINER

December 11, 2003